Abstract

The invention relates to an oriented pressure-sensitive adhesive and to a process for preparing it.

The pressure-sensitive adhesive comprises an acrylate-based UV-crosslinked polymer which is synthesized in a mass fraction of at least 50% from at least one acrylic monomer according to the general formula (I)

$$R_1$$

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in which R_1 is hydrogen (H) or a methyl group (CH₃) and R_2 is hydrogen (H) or a branched or unbranched, saturated C_1 to C_{30} hydrocarbon radical, which may optionally be substituted by a functional group, the pressure-sensitive adhesive, in the form of a film applied as a melt (hotmelt), having a preferential direction which is characterized in the free film by a shrinkback of at least 3% relative to an original stretching of the film in the preferential direction. The orientation is generated after polymerization by means of a suitable coating process and is subsequently "frozen in" by UV crosslinking. The pressure-sensitive adhesive is outstandingly suitable for use as an adhesive layer on single-sided or double-sided adhesive tapes.